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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,753	12/03/2001	George M. Brookner	770P009588-US(PCT)	4409
2512	7590	04/27/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			CHEUNG, MARY DA ZHI WANG	
			ART UNIT	PAPER NUMBER
			3621	
DATE MAILED: 04/27/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/914,753	Applicant(s) BROOKNER ET AL.	
	Examiner Mary Cheung	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/4/01, 5/13/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

1. This action is in response to the preliminary amendment filed on September 4, 2001.
Claims 1-55 are pending.

Drawings

2. New corrected drawings are required in this application because according to applicant the statement, the corrected drawing submitted on September 4, 2004 should include all the figures (Figs. 1-3, 4A-4B and 5-10); however, Figures 7 and 10 are missing.
3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "private key 236a" and "public key 236b" as described on page 7 line 1 of the specification; and "private key 238a" and "public key 238b" as described on page 7 lines 24-25, page 13 lines 6, 13, and page 14 lines 31, 38 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "903" in Fig. 9 has been used to designate both "processor" and "measuring device". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

- a) in lines 29 and 37 of page 15, the "measure device" and the "processor" use the same reference number "903";
- b) in line 34 of page 15, the number "833" should be "933";
- c) in line 30 of page 17, the number "950" should be "850".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 29-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 29-38 only recite an abstract idea. The recited steps of merely accounting consumption of a resource does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to account consumption of resource over another.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention generates plurality of records based on the consumption of the resource (i.e. useful, concrete, and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 29-38 deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7, 9-16, 18-20, 22, 26-35, 37-39, 41-45, 47-49, 51 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Liechti et al., U. S. Patent 5,715,164.

As to claims 1 and 29, Liechti teaches apparatus, and a method for use in an apparatus, for accounting for consumption of a resource comprising (column 4 lines 43-67 and Fig. 1; *specifically, "a resource" corresponds to postage in Liechti's teaching*):

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- a) a memory for providing a value indicative of a cumulative measure of the consumption (column 4 lines 22-29 and Figs. 1-3B);
- b) a processor for generating a plurality of records, each record including at least time information (item 615 of Fig 6A), an individual measure of the consumption (column 4 lines 50-67), and the value taking into account the individual measure (column 4 line 22 – column 5 line 4 and column 10 lines 50-65 and Figs. 1-2, 6A);
- c) an output device for transmitting ones of the records selected based on the time information therein (column 5 lines 1-11, 34-42 and Fig. 1).

As to claims 2, 14, 30 and 43, Liechti teaches each record also includes an indicator indicative of a truncation of the value (column 11 line 39-42).

As to claims 3 and 31, Liechti teaches the consumption of the resource includes utilization of a postal service, and the individual measure includes postage dispensed for the utilization of the postal service (column 4 line 22 – column 5 line 65 and Figs. 1-2).

As to claims 4, 15, 32 and 44, Liechti teaches each record is associated with a different transaction of postage dispensation (column 5 lines 1-4 and column 9 lines 62-64 and Figs. 1, 6A).

As to claims 5 and 33, Liechti teaches the time information in each record is indicated by an index identifying the transaction associated with the record (column 10 lines 51-55 and item 615 of Fig. 6A).

As to claims 6 and 34, Liechti teaches the time information in each record concerns a time of the transaction associated with the record (column 10 lines 51-55 and item 615 of Fig. 6A).

As to claims 7 and 35, Liechti teaches a controller for generating at least part of a postage indicium (column 4 lines 12-15).

As to claims 9, 18, 37 and 47, Liechti teaches a controller for cryptographically processing the plurality of records (column 11 lines 17-64).

As to claims 10, 19, 38 and 48, Liechti teaches the plurality of records are cryptographically signed to authenticate the records (column 11 lines 47-64 and Fig. 6A).

As to claim 11, Liechti teaches a system for processing charges for consumptions of at least one resource (column 4 lines 43-67 and Fig. 1; *specifically, "resource" corresponds to postage in Liechti's teaching*), the consumptions being measured using a plurality of devices (postage meters of Fig. 1), each device being associated with a different financial account (column 5 lines 5-65 and column 9 lines 62-64 and column 11 lines 17-22 and Fig. 6A), the system comprising:

- a) a receiver for receiving a plurality of records from each device, each record including at least a measure of a consumption of the resource (column 4 line 42 – column 5 line 4 and Figs. 1, 6A);
- b) a processor for determining, for each device, charges for the consumption of the resource based on a subset of the records received from the device (column 6 line 8 – column 7 line 6);

c) a transmitter for transmitting, for each device, the charges and information concerning the financial account associated with the device to a second system for settlement of the charges, and for transmitting the plurality of records associated with the device to a third system for storage (column 4 lines 22-42 and column 6 line 8 – column 7 line 9; *specifically, “a second system” corresponds to computer 103 of Fig. 1, and “a third system” corresponds to memory 240 of Fig. 2 in Liechti’s teaching*).

As to claims 12 and 41, Liechti teaches the measure of the consumption of the resource in each record includes an amount of individual postage dispensed for utilization of a postal service (column 4 line 22 – column 5 lines 4).

As to claims 13 and 42, Liechti teaches each record also includes a value indicative of cumulative postage dispensed, the value taking into account the amount of the individual postage in the record (column 4 lines 22-67).

As to claims 16 and 45, Liechti teaches the plurality of records include more than two records, and the subset of the records includes two selected records (column 5 lines 1-5 and column 6 lines 8-30 and Fig. 6A; *specifically, “two selected records” corresponds to “request packet” and “amount packet in Liechti’s teaching*).

As to claims 20 and 49, Liechti teaches a system, and a method for use in a system, for assessing charges for consumptions of at least first and second different resources, comprising (column 4 line 43 – column 5 line 4 and Fig. 1; *specifically, “first and second different resources” corresponds to the various types of postages that are consumed at the plurality of postage meters in Liechti’s teaching*):

- a) a communication apparatus for communicating with at least first and second devices, the first device providing a first measure of consumption of the first resource, the second device providing a measure of consumption of the second, different resource (column 3 lines 47-56 and column 4 line 22 – column 5 line 11 and Figs. 1-2; *specifically, “the first device” and “the second device” correspond to the plurality of the postage meters in Liechti’s teaching*);
- b) a processor for determining first charges based on the first measure of consumption of the first resource, and second charges based on the second measure of consumption of the second, different resource (column 5 lines 1-4 and column 6 line 8 – column 7 line 6 and Fig. 1; *specifically, this limitation is taught by Liechti as the data center collects plurality of information from the plurality of postage meters (101-1 through 101-P of Fig. 1), and each postage meter will be charged by the data center correspondently based on the determination of its consumptions*);
- c) a transmitter for providing first information concerning the first charges and a first account associated with the first device, and second information concerning the second charges and a second account associated with the second device for settlement of the first and second charges (column 5 lines 1-4 and column 6 line 8 – column 7 line 6 and column 9 lines 62-64 and column 11 lines 17-20 and Figs. 1, 6A; *specifically, this limitation is taught by Liechti as the data center collects plurality of information from the plurality of postage meters (101-1 through 101-P of Fig. 1), each postage meter account will be charged by the data*

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center correspondently based on the determination of its consumptions, and each postage meter is identified by its unique serial number and account number).

As to claims 22 and 51, Liechti teaches the first resource includes a postal service (column 4 lines 42-67).

As to claim 26, Liechti teaches the first device provides at least an amount of postage dispensed for the postal service (column 4 lines 22-67).

As to claim 27, Liechti teaches the first device includes a processor for generating at least part of a postage indicium (column 4 lines 12-15).

As to claim 28, Liechti teaches the first device includes a controller for generating at least part of a postage indicium (column 4 lines 12-15).

As to claim 39, Liechti teaches a method for use in an arrangement for processing charges for consumptions of at least one resource (column 4 lines 43-67 and Fig. 1; *specifically, "resource" corresponds to postage in Liechti's teaching*), the consumptions being measured using a plurality of devices (postage meters of Fig. 1), each device being associated with a different financial account (column 5 lines 5-65 and column 9 lines 62-64 and column 11 lines 17-22 and Fig. 6A), the arrangement including a first system and a second system (Figs. 1-2; *specifically, "a first system" corresponds to computer 103 of Fig. 1, and "a second system" corresponds to memory 240 of Fig. 2 in Liechti's teaching*), the method comprising:

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- a) receiving a plurality of records from each device, each record including at least a measure of a consumption of the resource (column 4 line 42 – column 5 line 4 and Figs. 1, 6A);
- b) determining, for each device, charges for the consumption of the resource based on a subset of the records received from the device (column 6 line 8 – column 7 line 6);
- c) transmitting, for each device, the charges and information concerning the financial account associated with the device to the first system for settlement of the charges, and for transmitting the plurality of records associated with the device to the second system for storage (column 4 lines 22-42 and column 6 line 8 – column 7 line 9).

As to claim 55, Liechti teaches the first charges include an amount of postage dispensed for the postal service (column 4 lines 22-67).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under

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37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 8, 17, 21, 23-25, 36, 46, 50 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liechti et al., U. S. Patent 5,715,164 in view of Verma et al., U. S. Patent 4,833,618.

As to claims 8, 17, 36 and 46, Liechti teaches accounting and charging for consumption of a resource as discussed above. Liechti does not specifically teach the consumption of the resource includes utility consumption. However, Verma teaches accounting and charging for utility consumptions (abstract and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the consumption resource in Liechti's teaching to include utility consumptions because this would expand the usage environment of the data center, thus to attract more consumers to use Liechti's teaching for efficiently charging the consumptions based on the usages.

As to claims 21, 23-25, 50 and 52-54, Liechti teaches charging for consumption of at least first and second different resources as discussed above. Liechti does not specifically teach the first and second resources include different utility resources, wherein the second resource includes a utility resource, wherein the utility resource includes natural gas and electric resource. However, Verma teaches these matters (abstract and Fig. 1). It would have been obvious to one of ordinary skill in the art at the

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time the invention was made to allow the consumption resources in Liechti's teaching to include natural gas and electric resource because this would expand the usage environment of the data center, thus to attract more consumers to use Liechti's teaching for efficiently charging the consumptions based on the usages.

13. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liechti et al., U. S. Patent 5,715,164 in view of Adler et al., U. S. Patent 4,069,675.

As to claim 40, Liechti teaches an arrangement for processing charges for consumptions of a resource as discussed above. Liechti does not specifically teach reallocating the resource based on statistics derived from the records stored in the second system. However, this matter is taught by Adler as reallocating of resources based on the index performance data (abstract and column 2 lines 35-57 and Figs. 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the teaching of Liechti to include the feature of reallocating the resources based on the statistics derived from the collected information because this would optimize the usage efficiency.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McFiggins et al. (U. S. Patent 3,792,446) discloses a data center equipped with a programmed digital computer and a voice answer-back unit processes telephone calls from users of postage meters equipped with combination locks.

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Kim et al. (U. S. Patent 5,224,046) discloses obtaining recharge codes for one or more postage meters

Abumehdi et al. (U. S. Patent 5,367,464) discloses remotely resetting franking meters.

Wilson (U. S. Patent 5,701,250) discloses providing a secure environment to allow the customer to purchase postage for counter resettable postage meters.

Debois (U. S. Patent 6,010,069) discloses a remote postage meter resetting system sending a request to recharge the postage meter.

Herring (U. S. Patent 6,064,992) discloses a postage meter includes an ascending credit register.

Ryan (EP 0 927 963 A2) discloses a virtual postage meter.

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Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 872-9306 (Official Communications; including After Final
Communications labeled "BOX AF")

(703) 746-5619 (Draft Communications)

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, 7th Floor Receptionist.

Mary Cheung
Patent Examiner
Art Unit 3621
April 21, 2004

